

CLAIMS

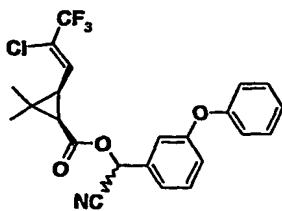
1. A process for the preparation of gamma-cyhalothrin comprising a) chlorinating 1R *cis*-Z 5 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylic acid to give 1R *cis*-Z 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylic acid chloride; b) esterifying 1R *cis*-Z 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylic acid chloride with 3-phenoxy benzaldehyde in the presence of a source of cyanide to form a diastereoisomeric mixture of 1R cyhalothrin isomers and c) 10 epimerising the diastereoisomeric mixture under conditions in which the least soluble diastereoisomer crystallises from solution.

2. A process according to claim 1 wherein the source of cyanide is an alkali metal cyanide, especially sodium cyanide.

15 3. A process according to claim 1 or claim 2 wherein steps b) and c) are combined in a one pot process.

4. A semi-batch process according to claim 1 or claim 2 where between 1% and 90% of the 20 one batch from step c) forms the basis for nucleation and crystallization of the following batch in step c).

5. A compound of formula (II)



(II)